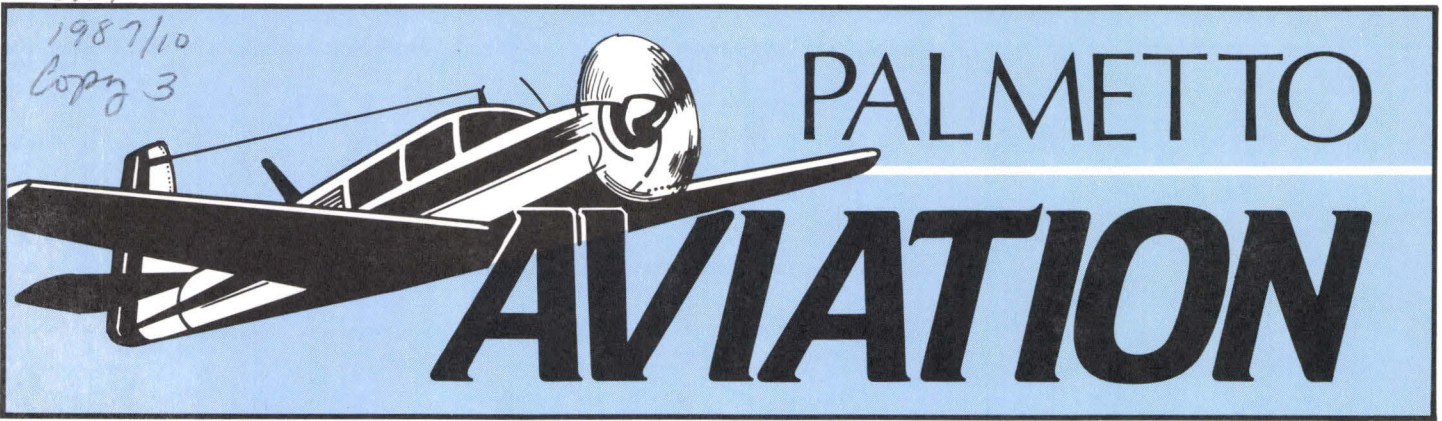


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October, 1987

## AERONAUTICS COMMISSION ASSISTS WITH PAPAL VISIT

The recent visit of Pope John Paul to South Carolina was a great success. Although the crowds were somewhat smaller than anticipated, everything went off like clockwork from an aviation standpoint.

On the Thursday before the Pope's Friday afternoon arrival, the Columbia Metropolitan Airport and the Aeronautics Commission facilities were hosts for three Air Force transports. Two C-141s and a C-5 B, from Travis Air Force Base in

California arrived with 200 secret service and security personnel.

While the C-141s offloaded the security personnel and their baggage, the C-5 unloaded several secret service limousines and the instantly recognizable "Popemobile." The Aeronautics Commission hangared the vehicles when they were not actually being used by the Pope.

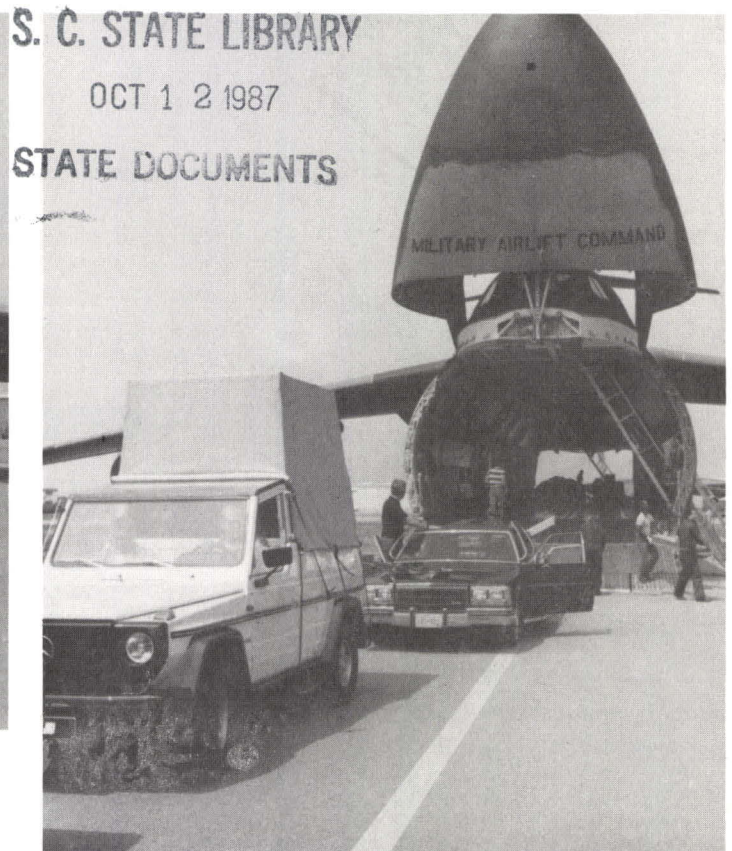
On Friday, the Commission's facilities were made available to the secret service

as a home base and staging area for security operations surrounding the Popes arrival and departure.

Although the aircraft flew on to Charleston to bed down, they returned Saturday morning to load everything up and move it on to San Antonio, Texas. The Papal visit utilized two sets of vehicles and security personnel that leap-frogged each other across the U.S. throughout the American tour.



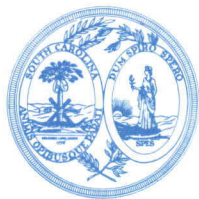
An Air Force C-141 (above) offloads security personnel while a C-5B (right) unloads the "Popemobile" and other secret service vehicles.



**FAA CHIEF, T. ALLEN McARTOR TO SPEAK AT AIRPORTS CONFERENCE**

See page 6





**PALMETTO AVIATION** is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the S.C. General Assembly to foster and promote air commerce within the state.

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# Top It Off!

Fuel mismanagement continues to be a major cause of aircraft accidents. Pilot error is usually the cause, as aircraft fuel systems rarely malfunction. A closer look at the problem demonstrates the need to stress preflight planning and management of fuel systems to pilots.

Federal Aviation Regulations (FAR's) require pilots for VFR flight to have enough fuel (considering wind) to fly to the first point of intended landing and, assuming normal cruise speed, enough fuel to fly for thirty minutes during the day and forty-five minutes for night flight.

With a calculator and owner's manual, most pilots can compute fuel consumption, estimated time enroute, and a conservative estimate of the fuel required for flight. The next step is to ensure that the aircraft has enough fuel to complete the intended flight.

During preflight, it is imperative that the amount of fuel is accurately determined. Many accidents result because pilots believe the fuel gauges rather than visually determining the quantity. Remember, it is important to understand the difference between how long the aircraft can remain airborne and how many miles it can travel.

Never use distance as a criteria for determining fuel loads. Some pilots are still influenced by automobile travel, where headwinds are not a serious factor. Recognize that every flight you take

is unique and the fuel required for that flight varies.

After confirming the fuel required for flight, monitor the fueling process and inspect the fuel after tanks are filled. Make sure it is the proper grade and inspect the fuel for water or other contaminants by taking a sample before each flight. If you find contaminants, check with a mechanic to see if extensive draining is necessary.

Once inside the aircraft, check the fuel selector(s) for freedom of movement, location and operation of fuel pump switch(s), appropriate fuel related gauges, and operation of the mixture control(s). Be familiar with the aircraft you're flying. Take the blindfold test to see if you can find the above items with a blindfold on. In case of an emergency, it is important to know the exact location of switches and controls.

In low wing aircraft, on the runway it's a good idea to visually check the gas caps. An unnamed flight instructor lost twenty gallons in one trip around the airport; he discovered his student had improperly secured the cap. The low pressure above the wing makes an excellent siphon and loss of fuel occurs quickly.

Last but not least, if weight and balance is not a factor, top off the tanks and use common sense to ensure a safe flight.



## AVIATION CRIME PREVENTION INSTITUTE NEW TOLL FREE NUMBER

The Aviation Crime Prevention Institute has installed a toll free telephone line for reporting theft information, location of stolen aircraft and equipment, checking serial numbers of used equipment or to report unusual activity.

**800-234-5444**

The number is available throughout the 48 states and will have a recording device attached for 24 hour service. For subscription service, change of addresses or general information should be directed to our normal commercial number 301-694-5444.

# C.A.P. NEWS



This month, *Palmetto Aviation* begins a three-part series on the Civil Air Patrol discussing their three main duties, the cadet program, aerospace education and emergency services. This series will be featured in our center pages in October, November and December to wrap up the CAP's 45th anniversary celebration.

*The following poem was written by Cadet Captain Jodie Holmes of the Greenville Composite Squadron.*

## CIVIL AIR PATROL CADETS

*We are cadets in the Civil Air Patrol.  
We must decide what we want to be.  
We should use our heads wisely, And forever stay strong.  
If we work together, We can't go wrong.  
A victory is won when, We all succeed,  
So what we must do, Is follow a creed.  
We are all important, In a very special way;  
We are the future, Of a later day.  
It's that famous phrase, That tells it all:  
"United we stand, Divided we fall."*

### Breakfast Club



**18** Orangeburg Municipal Airport  
Orangeburg (Election of Officers)

**Nov. 1** Kirk Airbase  
Lancaster

**Nov. 15** Lugoff  
Hosted by Lugoff Paraflight

**Nov. 29** East Cooper Airport  
Charleston

**Dec. 13** North Myrtle Beach  
Don's Pancake House

**27** Open

## Governor seeking incentives for airlines

Gov. Carroll Campbell will push for a bill next year that would provide tax incentives for airlines that establish hubs at South Carolina airports, a governor's aid said recently.

"Anything that would increase traffic at any of our three major airports would help our overall business climate," said Dr. Harry Miley, economic development advisor to Campbell.

Miley is a former economics professor at the University of South Carolina.

The proposed bill would offer tax breaks to airlines that would establish passenger, shipping or operations hubs, Miley said.

Earlier this year, the General Assembly passed a law that provides tax breaks to large manufacturing companies that expand or open in the state. Companies that locate in the more rural counties get larger tax breaks.

Southwest Airlines, which flies out of Memphis, Tenn., has said it will consider

the Greenville-Spartanburg Airport among several East Coast airports for its next hub.

Hans Hess, spokesman for the Upstate airport, said no decision has been made by the company.

The airport is undergoing a \$29 million expansion that is expected to handle passenger traffic during the next 25 years.

Miley also said Campbell is considering asking the General Assembly for other economic development incentives, including a private seed capital fund that would provide funds for business planning. Investors in the private fund would receive South Carolina tax credits for investing.

Another incentive option is an "infrastructure bank" that would allow communities to pool their industrial revenue bond requests and tap water and sewer lines in other counties, Miley said.

## AIRPORTS AVERAGE 12.3 PERCENT GROWTH IN SECOND QUARTER

Top 69 carrier airports in the U.S. averaged passenger growth of 12.3% in the second quarter of 1987 over the same period in 1986, according to statistics compiled by AIRPORTS. The 69 airports are those with one million or more annual enplanements. Average growth in aircraft operations was 8.2% for the same period. Busiest 10 airports accounted for 43.2% of enplanements at the 69 airports, and the busiest 15 were responsible for 55.1%. Ten busiest airports in terms of operations accounted for 34.1% of operations at the 69 airports, while the top 15 handled 45.9%.



# THE CIVIL AIR PATROL "ALWAYS VIGILANT"

*This past April we did a story on the Civil Air Patrol celebrating 45 years of service to America. To complete this anniversary celebration, we will present a three part series on the CAP's main functions, the cadet program, aerospace education and emergency services. We begin this series with The Cadet Program.*

The Civil Air Patrol cadet program is designed to inspire the country's youth to become leaders and dynamic American citizens through an interest in flying.

**HISTORY:** Early in 1942, the CAP set up a program to recruit and train CAP cadets to assist with tasks at the operational level, and, at the same time, to begin indoctrination and training toward becoming licensed pilots for service in the Civil Air Patrol or to go into the military service for military pilot training. The early recruitment and training offered the CAP cadet an advantage over other youths in that he, or she, would already have a knowledge of military life and of aviation's challenge and importance to the nation. The CAP was organized along military lines, wore uniforms, operated in a military manner, and performed defense functions.

**EARLY MEMBERSHIP:** Each man in the CAP was permitted to sponsor a boy, and each woman could sponsor a girl. The youths, in the age bracket of 15-17 years, had to be physically fit, in the last two years of high school, maintaining satisfactory grades, and be native-born of parents who had been citizens of the U.S. for at least 10 years.

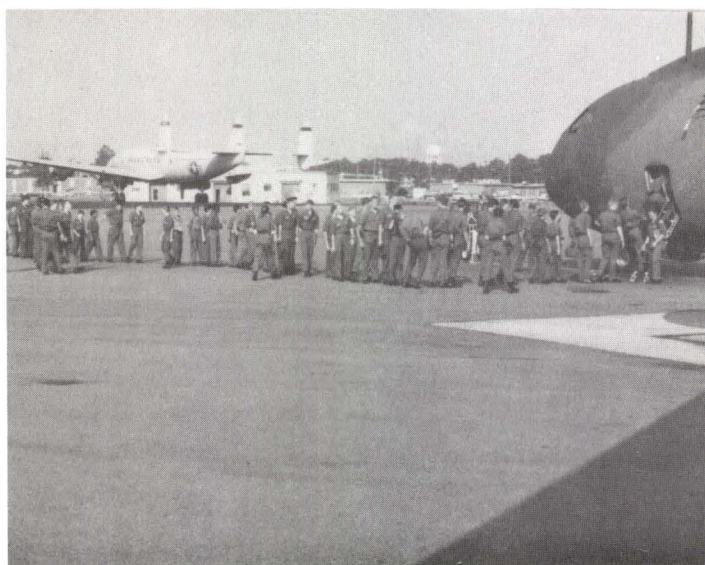
American youth responded to the opportunity to join and within six months of the program's onset, CAP had over 20,000 cadets attending weekly meetings in schoolrooms and other meeting places, studying in groups on their own, or side by side with senior members.

On April 29, 1943, the command jurisdiction of the CAP was transferred from the Office of Civil Defense to the War Department. Later the War Department issued a memorandum assigning to the Army Air Forces the responsibility for supervising and directing operations of the Civil Air Patrol. One significant outcome of this transfer of jurisdiction was its impact on Civil Air Patrol's cadet recruiting mission - Army aviation cadets. During 1944 the CAP flew 78,000 aviation cadets and recruits a total of 41,000 flying hours. Before the end of 1944, the CAP recruited an oversupply of cadets

and had taken over the responsibilities of administering cadet mental screening tests and operating centers where cadets received preliminary medical checkups.

**CURRENT REQUIREMENTS:** Initial cadet membership is open to young people who have either satisfactorily completed the sixth grade or are between the ages of 13 and 18. Each candidate must be: (1) a United States citizen or an alien admitted for permanent residence; (2) of good moral character; (3) be enrolled in a private or public school and maintaining satisfactory progress; (4) be single; (5) not be a member of the armed forces.

The CAP cadet program is divided into five phases: aerospace education, moral leadership, leadership laboratory, activities, and physical fitness. In the aerospace education factor the CAP cadet completes the requirements through self study of the materials involved. Moral leadership requirements with the cadet program are completed under the supervision and guidance of the unit chaplain in moral leadership discussion groups. Leadership laboratory and physical fitness requirements are completed under the guidance of the leadership officer who is appointed by the CAP squadron commander.





The method by which a cadet advances within the cadet program is through the completion of achievement contracts. The contracts are printed on a standard form in which a cadet agrees to complete all requirements of a given contract within a specified time period. For each of the fifteen achievements that make up Phases I-IV in the cadet program, there is a contract form which the cadet completes in consultation with his squadron commander. When the specifications of each contract have been met, the cadet is eligible to progress to the next achievement and advance in grade.

**PHASE I** — All cadets learn to function in a military-type environment. They learn to march, wear the CAP uniform properly, and render military courtesies to the flag and superior officers. Phase I cadets take part in all squadron activities and begin their physical fitness and moral leadership programs.

**PHASE II** — The learning phase - where cadets concentrate on subjects related to flight and on factors relating to the nation's aerospace power. This is in addition to the leadership laboratory, activities program, physical fitness and moral leadership requirements for each

of the achievements in Phase II. After completion of Phase II requirements, including attendance at an encampment, a cadet receives the General Billy Mitchell Award which qualifies him for entrance into Phase III.

**PHASE III** — The leadership phase - designed to require each cadet to assume increased responsibilities, serve in leadership positions and perform the tasks associated with them. Phase III cadets are encouraged to help Phase II cadets with their advancement. Completion of the requirements for all achievements in Phase III, as certified by the squadron commander, entitles the cadet to receive the Amelia Earhart Award and advance to Phase IV.

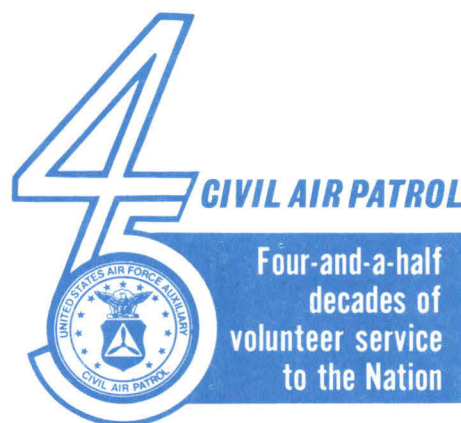
**PHASE IV** — The executive phase - the achievements are designed to provide high level leadership experiences to the individual cadet. When the cadet has completed all requirements in phase IV, CAP considers either him or her qualified to take a written examination which, if passed, will be their passport to the honor cadre. This examination is the General Carl A. Spaatz examination, and it is a comprehensive evaluation of all aspects of the four cadet program phases.

Once the General Carl A. Spaatz examination is successfully completed,

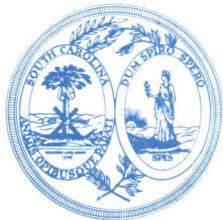
cadets are promoted to full colonel and placed in an honor cadre. Spaatz cadets are considered aerospace leaders and they deserve such distinction.

**CADET ACTIVITIES INCLUDE:** Participation in Search and Rescue Exercises and actual missions, Summer Encampment, International Air Cadet Exchange Program, Solo Flight Scholarships, Air Training Command, Computer Clinics, and Cadet Officer School, Green Beret, and education scholarships.

*South Carolina has 20 Civil Air Patrol squadrons throughout the state. For the Squadron nearest you, contact SC Wing Headquarters, P.O. Box 6541, West Columbia, SC 29171-6541 or phone 737-1738.*







## TENTH ANNUAL SOUTH CAROLINA

# AIRPORTS CONFERENCE

## FAA Chief to be Featured Speaker

T. Allen McArtor, who was sworn in as the tenth administrator of the Federal Aviation Administration this past July will be the featured speaker at Thursday's luncheon at this year's Airports Conference.

The 45 year-old McArtor assumed his new duties after a 13-year career as Senior Vice President of Communications for Federal Express in Memphis, Tennessee. A native of St. Louis, McArtor flew light aircraft in high school before attending the U.S. Air Force Academy in Colorado Springs.

After graduating from the Academy, McArtor saw action in Viet Nam as a reconnaissance pilot. In 31 months of combat, he flew over 200 missions and earned 10 air medals including the Distinguished Flying Cross and the Silver Star. McArtor finished his 10-year military career with a tour with the Air Force "Tunderbirds."

McArtor holds a Masters Degree from Arizona State University and is on the Board of Trustees of the U.S. Air Force Academy Falcon Foundation.

McArtor and his wife Grace have two sons, one attends the Air Force Academy

and the other is a senior at Memphis State University.

The new Administrator, speaking on his management style, said, "I do not intend to be a caretaker administrator. Nobody has asked me to hold the reins and not make any sudden moves. The reason I agreed to take this job was that I felt there were some things I could do differently or better or be able to illuminate some issues or provide some guidance to make improvements in the system."

It should be an interesting luncheon. See you at Hilton Head.

## REGISTRATION FORM

### TENTH ANNUAL SOUTH CAROLINA AIRPORTS CONFERENCE

### November 17-20, 1987

NAME \_\_\_\_\_  
(As You Want It Shown On Your Name Badge)

COMPANY/AIRPORT \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_

### REGISTRATION FEE

Arrival: \_\_\_\_\_ Tuesday evening and Wednesday A.M. arrivals.....\$100.00\*  
\_\_\_\_\_ Wednesday P.M. after lunch arrivals.....\$80.00\*

\* Above registration fees include luncheons, receptions and Thursday's seafood cookout (all functions requiring tickets)

Amount enclosed.....(\$ \_\_\_\_\_)\*

### SPOUSE/GUEST REGISTRATION

NAME \_\_\_\_\_  
(As You Want It Shown On Your Name Badge)

Select functions you wish to attend and remit accordingly. Tickets will be included with your registration material.

\_\_\_\_\_ Luncheon - Wednesday, November 18 - \$20.00.....

\_\_\_\_\_ Luncheon - Thursday, November 19 - \$16.00.....

(OR)

\_\_\_\_\_ "Daufuskie Seafari" - (spouse tour-lunch)

Thursday, November 19 - \$35.00.....

\_\_\_\_\_ Cocktail Party/Seafood Dinner -

Thursday, November 19 - \$22.00.....

Amount enclosed.....(\$ \_\_\_\_\_)\*

\*TOTAL COMBINED AMOUNT OF CHECK.....\$ \_\_\_\_\_

PLEASE MAKE CHECK PAYABLE TO S.C. AIRPORTS CONFERENCE.

Mail to: Mr. Robert Thurber, S.C. Airports Conference, P.O. Box 12547, Columbia, S.C. 29211

# Commission Notes

The South Carolina Aeronautics Commission, in its last monthly meeting, approved allocations totaling \$5,300.00 of Capital Improvement Bond Funds for development and improvement projects.

Some projects have federal, state, and local participation, while others have state and local participation only. Commission approval authorizes state participation in state-local projects and authorizes state participation in federal-state-local projects subject to issuance of a federal grant.

The following is the most recently approved projects:

## Donaldson Center

An allocation of \$1,650 to repair the broken concrete on runway 4. This is a 50/50 project with the local share being \$1,650 and the state share being \$1,650.

## Ridgeland Municipal Airport

An allocation of \$3,650 to overlay connecting taxiways to the fueling area and ramp. This is a 50/50 project with the local share being \$3,650 and the state share being \$3,650.

## DON'T LET THIS HAPPEN TO YOU!!!

An FAA Flight Safety Specialist recently talked to a pilot who spent most of last year in a hospital and his words were, "I did a real dumb thing." He stated his airplane had about 350 hours on it since an annual inspection was performed, and that he thought 100 hour inspections were too expensive for his private airplane.

While cruising on course at an altitude of 4,500 feet, he noticed oil starting to streak the windshield. A short time later,

the engine broke two connecting rods and burst the case, resulting in a complete loss of power, and he crashed just 25 minutes after take-off.

Remember, the airplane owner or operator is responsible for having required maintenance done. The mechanic is responsible for the proper performance of maintenance. Then the pilot goes to the guillotine when the FAA catches them flying airplanes without the required maintenance being performed on them.

—FAA, FSDO-64, Wichita

# Help Help Help

## Help with the Map

We need your help! We are currently working on the new South Carolina Aeronautical Chart and we need your input.

As all of you know, things change rapidly in aviation sometimes. As you have flown in and out of the airports in and around your local area, how many times have you noticed something that did not agree with your chart? Now is your chance to make things right.

Take a few minutes and look over your copy of the 1986-87 South Carolina Aeronautical Chart and if you find anything that is out of date or that might have changed or been updated, please make a note of it.

Once you get your list together you can send it to Wayne Phillips at P.O. Drawer 1987, Columbia, SC 29202, or call Wayne or Paul Werts toll-free (in state) at 1-800-922-0574.

We would like to get the new charts completed before the end of the year so please **DO NOT** delay in sending your information.

## Aviation Calendar

*The following are aviation events occurring in or near South Carolina.*

**OCT. 3-4:** Clio Crop Care Airfield, Clio. Tenth Annual Fall Fly-in. If you missed the spring fly-in, don't miss this one. Transportation to Bennettsville hotels will be provided.

**OCT. 4-10:** Second Annual North Carolina Aviation Week. Plans call for a joint Tennessee-North Carolina air tour on the 9th through the 11th. No registration fee, but you foot your own bills. For more information, call Diane Guskay at (615) 741-3208, or Wayne Hallyburton at (919) 787-9618.

**OCT. 10-11:** Chester County Fall Affair. Festival climaxes with an airshow

and open house at the Chester Airport. Attractions will include aerial acrobatics, helicopter rides, parachute jumps, sailplanes and static displays. Gates open at 10 a.m. on Sunday the 11th with the airshows starting at 2 p.m.

**Oct. 18:** Bamberg County Airport. Aviation Appreciation Day. Festivities begin at 1 p.m. Attractions include parachutists, ultralights, warbirds and concessions.

**OCT. 19:** FAA Safety Seminar. Sponsored by the Cheraw Airport Commission. Chesterfield/Marlboro Technical College, Room 112; 7-9 p.m. Subjects include Collision Avoidance and ARSA pilot procedures.

**OCT. 24-25:** Beaufort MCAS Open

House. Everything you have come to expect from a military open house and more. This year's show features the Blue Angels in their new F-18 Hornets as well as other aerial acts. Two full days of flying!

**NOV. 9-10:** AAAE Airport Construction and Project Management workshop. Will be held in Columbia.

**NOV. 17-20:** Tenth annual South Carolina Airports Conference. Marriott's Hilton Head Resort. Workshops and seminars designed for airport sponsors, managers, operators, FBOs and anyone interested in aviation in South Carolina. Featured speakers include FAA Administrator T. Allan McArtor and Lt. Gov. Nick Theodore.





**SOUTH CAROLINA  
AERONAUTICS COMMISSION**  
P.O. Drawer 1987  
Columbia, South Carolina 29202

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**This Month...**

## **Inside Palmetto Aviation**

- **FAA Administrator To Speak At Conference**
- **SCAC Assists With Papal Visit**
- **Civil Air Patrol Cadet Program**
- **New Chart Being Prepared**
- **Commission Notes**
- **Aviation Calendar**
- **...and much more**

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# **WOULD YOU BELIEVE IT**

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## **THE CLOUDED CRYSTAL BALL**

In the opinion of competent experts it is idle to look for a commercial future for the flying machine. There is, and always will be, a limit to its carrying capacity which will prohibit its employment for passenger or freight purposes in a wholesale or general way. There are some, of course, who will argue that because a machine will carry two people, another may be constructed that will carry a dozen, but those who make this contention do not understand the theory of weight sustentation in the air or that the greater the load the greater must be the lifting power (motors and plane surface), and that there is a limit to these---as will be explained later on---beyond which the aviator cannot go.

(From "Flying Machines: Construction and Operation," by W.J. Jackman, M.E., and Thos. H. Russell, A.M., M.E., **1910**)

## **STILL CLOUDED**

In the early 1940s, America's leading scientists predicted the aircraft jet engine would have no commercial impact and only limited military use!

**This publication is printed and distributed by the South Carolina Aeronautics Commission in the interest of aviation safety and to foster growth of responsible aviation in the state. The viewpoints expressed in articles credited to specific sources are presented as the viewpoints of those writers and do not necessarily reflect the opinion of the South Carolina Aeronautics Commission.**